Claim rejections under 35 USC §103(a)

Claims 1-18, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romas et al. (1995) in view of WO 9619574. Applicants respectfully disagree.

Pursuant to MPEP 2143, "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."

As the Examiner states, the Romas reference does not "teach *in vivo* use of these reagents for treatment of osteoporosis, and use of soluble IL-11R mutants." While WO 9619574 is non-enabling in terms of the claimed *in vivo* treatment methods for reasons presented above. Particularly, in view of Nandurkar et al. (Blood 90: 2148-2159, 1997, provided herewith as **Exhibit B**), a skilled artisan would have no motivation to combine these references, and would have no reasonable expectation of success even if, for the sake of argument, the references were combined. In addition, the Romas reference and the non-enabling WO 9619574 publication, even when combined, still would not teach or suggest all the claim limitations, particularly the use of soluble IL-11R mutants, which is derived from the knowledge of the binding domain / motif on IL-11R for gp130 first disclosed in the present application.

Accordingly, Applicants submit that none of the three requirements for establishing a prima facie case of obviousness is met, reconsideration and withdrawal of rejection under 35 U.S.C. 103(a) are respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-

7000. Should an extension of time be required, Applicants hereby petition for same and request that the extension fee and any other fee required for timely consideration of this submission be charged to **Deposit Account No. 18-1945**.

Date: <u>January 16, 2002</u>

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Respectfully Submitted,

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Reg. No. P-50,306